R (316)

DESCRIPTION OF SELECTED MILITARY EQUIPMENT

DEPARTMENT OF STATE A/CDC/MR
REVIEWED BY P Schmuhl DATE 7/2/85
DCS ☐ or XDS ☐ EXT. DATE
EXEMPTIONS ☐
RELEASABLE ☑

F-15. The US-made F-15/Eagle was designed as the first-line US air superiority aircraft. It is an advanced single-place, fixed wing, twin engine aircraft designed specifically as an all-weather superiority fighter with a secondary air-to-ground mission. It combines advanced radar, fire control, and electronic countermeasure systems with a mix of air-to-air missiles and a 20 mm cannon for use in air-to-air engagements. Representative combat radius for an air-to-air mission is approximately 500 nautical miles with external fuel tank (but no CFT). The F-15 was first delivered to the USAF in 1973. F-15 sales to Israel were approved in 1976 and 1978 and to Saudi Arabia in 1978. Delivery of F-15s to Japan are scheduled to begin next year.

Conformal Fuel Tanks (CFT). CFTs are streamlined fuel tanks which fit along the sides of the F-15 fuselage. An F-15 equipped with DFTs can carry an additional 1,500 gallons of fuel. This could extend the aircraft's range or increase its time aloft by 40-70 percent. (The precise amounts would depend on the specific flight profile, payload, etc.) CFT flight testing began in 1974. They are being delivered to the Israeli Air Force this year. The US Air Force has requested funds in the 1982 budget to purchase 75 ship-sets fo CFTs (150 individual tanks). CFTs would improve the ability of the Saudis to carry out air superiority, and combat air patrol missions. CFTs would also allow the Saudis to conduct air defense missions over Eastern province oil facilities from

bases in the West. Without CFTs, the F15s would have to operate from vulnerable forward bases to be fully effective in any of these missions. Although with CFTs the Saudis could reach targets in Israel with reduced bomb loads from the main operating base at Taif, the altitudes they would have to fly on such missions would make them vulnerable to Israeli defenses.

AIM-9L. The AIM-9L Sidewinder is a short range air-to-air infra-red homing missile that can be launched from F-15 and some other fighter aircraft. The AIM-9L entered production in 1976, and is currently used by the US Air Force and Navy. It has a better seeker, guidance system and warhead than the older AIM-9P-3 missiles now in Saudi inventories. These improvements increase the missile's ability to lock onto and destroy hostile aircraft from any angle, including head-on. Such a capability could be crucial in intercepting attacking aircraft before they reached Saudi coastal oil facilities. The AIM-9L also has been sold to Israel.

Airborne Early Warning (AEW) Aircraft. AEW aircraft are essentially flying radar stations. They can detect hostile aircraft at ranges of more than 200 miles and direct interceptor aircraft to them. AEW aircraft are especially valuable for detecting low flying aircraft which, at most ranges, are invisible to surface radars. The US produces two types of AEW aircraft. The E-2C Hawkeye has been used by the Navy since 1972. The E-3A AWACS has been in service with the Air Force since 1977. The NATO allies are scheduled to purchase 18 AWACS. Japan has purchased E-2Cs, and Israel received four E-2Cs beginning in 1977.

A recently completed USAF study financed by the Saudis determined that an air-borne radar and warning system would best meet Saudi air defense needs, with no significantly greater manpower requirement than a totally ground-based system. (Though in either case the Saudis will be unable to fully operate and maintain an aerial or ground-based system without contractor assistance.) Such an airborne system provides the only means of detecting low-flying aircraft far enough beyond Saudi borders to give Saudi air defenses adequate warning time to intercept the attacker before it reaches coastal targets. On the basis of this study, the Saudis will be able to formulate their specific request (number and type) for early warning aircraft. US E-3A and E-2C aircraft represent highly sophisticated technology, but a Saudi version would not include sensitive, non-releasable systems.

Tanker Aircraft. Tanker aircraft are used to refuel other aircraft in flight, allowing them to remain airborne for extended periods. This permits increases in the effective range and, in some cases, payload of fighter aircraft. It increases the on-station, or patrol time, of air defense aircraft. US tanker aircraft include the KC-135 (a derivative of the Boeing 707), the KC-130 (derived from the C-130/Hercules transport), and the new KC-10 (derived from the DC-10 airliner). The KC-130H tankers operated by Saudi Arabia are not compatible with the F-15. Israel operates both KC-130s, and a tanker version of the Boeing 707. The Saudis have not asked for a specific tanker, but are looking to us for advice on which one might make the most sense for them.

Multiple Ejection Bomb Racks (MERS). (No decision on release has been made.) We will be working with the Saudis on how they might improve their air-to-ground capability to defend against

invasion, examining a range of alternatives in addition to MERS for the F-15. MERS would allow the F-15 to carry 18-22 500-pound bombs. The Saudis believe that this option is important in the event of a massed armored attack from Iraq or Yemen. (MERS would, however, make the F-15s more of a threat to Israel.)

Kfir. The Israeli designed and produced Kfir is based on the design of the delta-wing French Mirage 5, and has the engine used in the US-made F-4/Phantom II. The Kfir is a high-speed, highly maneuverable fighter. It is best suited for air defense but has a ground attack capability as well. It is generally regarded as being more capable than the Mirage 5 and the US-made F-5E, but less capable than the US-made F-16. Since Kfir uses a US-designed engine, the US Government must approve any Israeli sales to third countries. The policy of this Administration is to approve such sales to countries where the US itself would sell comparable aircraft.